ENVIRONMENTAL CHEMISTS

Date of Report: December 11, 1995 Date Received: November 30, 1995

Project: Metro Self Monitor, PO #M51487 Date Samples Extracted: December 6, 1995 Date Extracts Analyzed: December 7, 1995

RESULTS FROM THE ANALYSIS OF THE PROCESS WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL AND ZINC Samples Processed Using Method 3005

Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	<u>Nickel</u>	<u>Zinc</u>
M51487	0.82	0.52	0.45	0.10
Method Blank	<0.05	< 0.05	< 0.05	< 0.05

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Date of Report: December 11, 1995 Date Received: November 30, 1995

Project: Metro Self Monitor, PO #M51487

QUALITY ASSURANCE RESULTS FOR CHROMIUM, COPPER, NICKEL AND ZINC

Laboratory Code: 64398 (Duplicate)

	Reporting	Sample	Duplicate	Relative Percent	Acceptance
Analyte:	Units	<u>Result</u>	Result	Difference	<u>Criteria</u>
Chromiun	n mg/L (ppm)	0.82	0.76	8	0-20
Copper	mg/L (ppm)	0.52	0.46	12	0-20
Nickel	mg/L (ppm)	0.45	0.38	17	0-20
Zinc	mg/L (ppm)	0.10	0.09	11	0-20

Laboratory Code: 64398 (Matrix Spike)

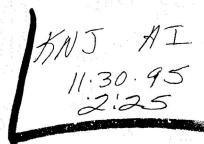
Analyte:	Reporting Units	Spike Level	Sample Result	% R MS	ecovery MSD	Acceptance Criteria	Relative Percent Difference
							O
Chromium Copper	mg/L (ppm) mg/L (ppm)		$0.82 \\ 0.52$	95 87	95 89	80-120 80-120	2
Nickel Zinc	mg/L (ppm) mg/L (ppm)		0.45 0.10	96 98	94 98	80-120 80-120	2 0

Laboratory Code: Spike Blank

	Reporting	Spike	% Recovery	Acceptance
Analyte:	Units	Level	MS	Criteria
Chromium	mg/L (ppm)	5	102	80-120
Copper	mg/L (ppm)	5	96	80-120
Nickel	mg/L (ppm)	10	101	80-120
Zinc	mg/L (ppm)	5	103	80-120

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

SAMPLE CHAIN OF CUSTODY



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SITE NO.	A		PROJ	ECT NAME		PURCHASE C	RDER #	
7238 SAMPLERS (SIGNATURE)	· · · · · · · · · · · · · · · · · · ·		metro self monitor			M 5/487 PROJECT LOCATION		
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REMARKS						Dispose after 3 Return Sample	AMPLE DISPOSAL INFORMATION Dispose after 30 days Return Samples Call for Instructions	
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ENVIRONMENTAL CHEMISTS

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

December 11, 1995

Gerry Thompson, Project Leader Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on November 30, 1995 from your Metro Self Monitor, PO #M51487 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

>- Kurt Johnson

Chemist

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Enclosures

FAX: 382-7335

ACU1211R.DOC

ENVIRONMENTAL CHEMISTS

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

December 11, 1995

INVOICE # 95ACU1211-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M51487: Results of testing requested by Gerry Thompson, Project Leader for material submitted on November 30, 1995.

1 process water sample analyzed for Chromium, Copper,	
Nickel, Zinc @ \$65 per sample	\$ 65.00
Amount Due	\$ 65.00